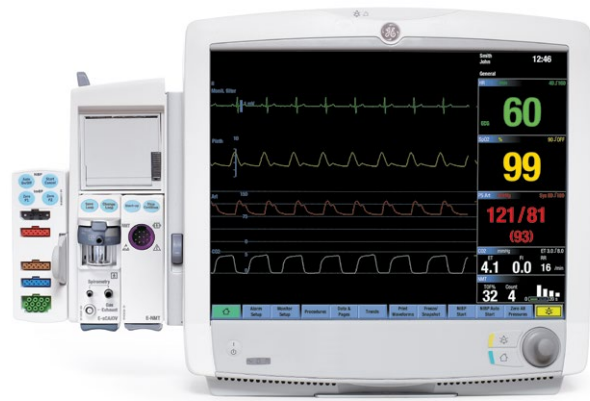GE Healthcare

CARESCAPE Monitor B650

Efficiency built in.

The CARESCAPE™ Monitor B650 can help you manage your patient flow by getting you the right clinical information, when and where you need it. Its intuitive design makes it easy to use for all staff experience levels, and upgradeability protects your long-term system investments.

Providing clinical excellence, dependable data continuity and integration

- Combines the best of Marquette™ Electronics and Datex-Ohmeda™ legacies into one platform

- Delta pressure (SPV and PPV) monitoring capability may help the clinician in guiding fluid management

- CARESCAPE Patient Data Module provides consistent hemodynamic measurement during intra-hospital transport and also transfers trend data

- Innovative algorithms aid in accurate diagnoses, including GE EK-Pro, GE DINAMAP™ non-invasive blood pressure, and 12 SL™ diagnostic ECG with direct 2-way MUSE™ ECG communication

- Comprehensive respiratory monitoring ranging from standard CO_2 to optional gas exchange and metabolic monitoring

- Various parameters can help you assess the adequacy of anesthesia in the OR, and give insight to patients' readiness for ventilator weaning in the ICU

- Connectivity with the CARESCAPE Gateway enables communications to EMR systems through standard HL7® protocol

- Combination monitoring capability enables mobile patients to be monitored

Compact, flexible, intuitive design

- Pages & Profiles functionality with dedicated software for OR, PACU, ICU, NICU and ED care areas can increase flexibility and workflow efficiency by configuring monitors to unit standards and patient populations

- User-controlled views, from eight to 14 waveforms with overlays and insets, allow for flexibility and customization, based on caregivers' and patients' needs

- Exceptional alarm functionality, including Auto View on Alarm which automatically shares clinically significant alarms within and across care units, also provides flexibility in setting alarm limits and priorities which may help optimize your workflow and reduce alarm fatigue

- Integrated USB ports allow for a keyboard, mouse, barcode readers and other data entry device attachment

- Compact design with pivoting frame fits ergonomically into different environments and allows for customizing with multiparameter modules and other options

Protecting long-term investments

- Backwards compatible with many existing Marquette Electronics and Datex-Ohmeda components

- Structured upgrade programs can lower costs of ownership

- Remote service through InSite™ ExC provides updates and predictive maintenance

Technical specifications

Display

Size	15 in (diagonal)
Type	Active matrix color TFT LCD
Resolution	1024 x 768 pixels (XGA)
Number of traces	8 individual, up to 14 with overlays and insets
Sweep speed	0.625, 6.25, 12.5, 25, 50 mm/sec
Configuration	Automatic configuration according to parameter availability. Manual configuration with up to 8 user-configurable profiles for care-specific configurations, and up to 6 user-configurable display pages for each profile

Controls

Touch screen	Resistive technology
Keys	3 standard hard keys: ON/Standby, Home, Pause Audio Alarm 11 additional touchscreen keys: Trends, Monitor Setup, Data & Pages, Alarm Setup, Procedures, Print Waveforms, Freeze/Snapshot, NIBP Auto, NIBP Start/stop, Parameters, Zero All Pressures
Remote control	Ordered separately

Pivoting module frame

Features	Can be pivoted to a locked closed position, locked to an open 45° angle, or locked to a 90° open position. Support for CARESCAPE Patient Data Module or Patient Side Module
Options	Two optional E-module slots and optional recorder

Parameters and modules

Parameters	Patient Side Module (E-PSM, E-PSMP)	CARESCAPE Patient Data Module (PDM)
ECG	3, 5, 6 and 10 leadwires	3, 5, 6 and 10 leadwires
SpO_2	GE SpO_2	Masimo SET®, Nellcor OxiMax®
NIBP	GE	GE DINAMAP SuperSTAT algorithm
InvBP	0 or 2	0 or 4
Temp	2	2, Optional with C.O.
Cardiac output	-	Optional with temperature

Parameters	E-Modules[1]
Multi parameter modules	
InvBP & Temp	E-P[2], E-PP[2], E-PT
SvO_2 & C.O.	E-COP, E-COPSv
Single parameter modules	
SpO_2	E-NSATX, E-MASIMO
NMT	E-NMT
CCO	E-PiCCO
EEG	E-EEG
BIS	E-BIS
Entropy™	E-ENTROPY
Respiratory modules	
Sidestream CO_2	E-miniC
Sidestream CO_2 & O_2	Single-width[3]: E-sCO, E-sCOV
Sidestream CO_2, O_2, Agents & N_2O	Single-width[3]: E-sCAiO, E-sCAiOV, E-sCAiOE, E-sCAiOVE, E-sCAiOVX
Patient Spirometry	Single-width[3]: E-sCOV, E-sCOVX, E-sCAiOV, E-sCAiOVE, E-sCAiOVX
Gas exchange or metabolics	E-sCOVX, E-sCAiOVX

Parameter modules are ordered separately.

NOTE: For a complete list of compatible devices, please refer to the CARESCAPE Modular Monitors Supplemental Information Manual Software version 2.

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[1] Acronyms for the parameters measured are as follows: P=invasive pressure; R=respiration rate, E=ECG; S=SpO_2; T=temperature; N=NIBP; C=CO_2 and N_2O; Ai=anesthetic agents and nitrous oxide with agent identification; O=O2; V=Patient Spirometry; X=gas exchange; s=single-width

[2] Module measures invasive blood pressure only

[3] Displayed data (including but not limited to TV, MV, RR, Raw and N_2O) trends and alarms may vary depending on the host device. Specifications listed represent the capabilities of the modules. Always check the host device's User Manual for additional information.

Software version and options

Main software	ESP v2
	Care-area specific software packages to optimize workflows: OR, PACU, ICU, ED, NICU
Other software options	Extended software options specific to each main software package

Upgradable with the CARESCAPE Upgrade Program

Networking

Compatibility	CARESCAPE Network with peer-to-peer communication S/5 Network with iCentral v5.1
Features	Centralized viewing and remote alarm management with bed-to-bed viewing and AVOA functionality
Network type	LAN, WLAN (optional)
WLAN communication protocol (optional)	IEEE 802.11a/b/g

I/O connectors

Ethernet	1 RJ45 for monitor network 3 optional RJ45 for HIS, service and Unity Network™ ID
E-Port	1 optional DB9F, for CARESCAPE Patient Data Module
Display	1 DVI out (VGA with adapter)
USB port	2 USB 2.0 2 optional USB 2.0

Mounting

GCX compatible

FM quick-mount compatible

Integrated carrying handle

Paper recorder (optional, built-in)

Method	Thermal dot array
Horizontal resolutions	24 dots/mm (600 dpi) @ 25 mm/sec
Vertical resolution	8 dots/mm (200 dpi)
Number of waveform channels	Four
Paper width	50 mm (2 in)
Paper length	30 m (100 ft)
Paper speed	1, 5, 10, 12.5 25 and 50 mm/sec

Performance specifications

Alarms

Categories	Patient status and system status
Priority	High, Medium, Low, Escalating and Informational
	In accordance with IEC 60601-1-8
Notification	Audible and visual
Setting	Default and individual
Visual alarm notification	Red, yellow, cyan
Audio pause	2 or 5 minutes
Volume	79 dB(A) (max) measured at 1m, high priority alarm

Power specifications

Power supply

Universal input voltage range	100 to 240 Vac +/-10%, 50/60 Hz
Power consumption	140 VA (max)
Protection class	Class I
Grounding	Hospital grade
Cooling	Natural convection – no fans

Battery (optional)

Type	Exchangeable Lithium-Ion
Number of batteries	1
Voltage	11.1 V (nominal)
Capacity	6.21Ah (typical)
Charge time (to 90% of full capacity)	2 to 3 hours, depending on configuration
Run time	1 to 2 hours, depending on configuration
Battery life	150 cycles to 80% capacity

Environmental specifications

Operating conditions

Temperature	10°C to 35°C (50°F to 95°F)
Relative humidity	10% to 90% non-condensing

Storage conditions

Temperature	-20°C to 60°C (-4°F to 140°F)
Relative humidity	10% to 90% non-condensing

Physical specifications

Dimensions (H x W x D)	36 x 37 x 22 cm (14.2 x 14.6 x 8.67 in)
Weight	9.8 kg (21.6 lb) without modules (incl. battery, recorder, E-module frame)
Patient Side Module	+ 0.6 kg (1.3 lb)
CARESCAPE Patient Data Module	+ 1.1 to 1.3 kg (2.4 to 2.9 lb)
E-modules	+ 0.3 to 1.6 kg (0.6 to 3.5 lb)

Warranty

One year.

Imagination at work

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